



## Reclamation at Goldstrike Mine

November 1998  
by Doug Jensen

The Goldstrike Mine owned and operated by USMX of Utah, Inc. (a subsidiary of Dakota Mines) is in final closure. I feel that we have completed the reclamation of the project site in an exemplary manner. Using environmentally sound practices and the work completed meets or exceeds regulatory requirements.

Mining at Goldstrike ended in October of 1994 and reclamation of the pits and other related site areas ensued. Reclamation continued through 1995 when USMX had financial difficulties and no further work was done until the summer of 1998. At that time an agreement between Dakota and the regulatory agencies allowed Dakota to complete the reclamation with the Utah Department of Oil, Gas and Mining acting as an overseer. This was a precedent setting event as Dakota had forfeited the reclamation bond to UDOGM which in turn utilized Dakota personnel at the site to complete the closure.

Total mining disturbance at the Goldstrike Mine, including haul roads, waste dumps, process facilities, leach pads, and associated support areas consisted of 388.8 acres. Of this a total of 202 acres had been reclaimed before reclamation activities were suspended in 1995. In addition 98,500 linear feet (18.7 miles) of exploration drill roads was recontoured and seeded in the surrounding exploration district.

Mining at Goldstrike has been staged through a series of ten separate pits. Of these 10 pits, one pit, the Goldtown has been completely backfilled. Two pits, Main Zone and Hassyampa, are backfilled with the exception of the upper reaches of the highwalls. Seven pits, Basin, Padre, Hamburg, Covington, Caribou, Moosehead, and Beavertail have the lower reaches backfilled to where the pit do not have the capacity to impound water. All pit perimeter roads and disturbed areas which are not currently occupied by leach pads or associated process facilities, were reclaimed at that time with the exception of the highwalls which have been left in place.

By staging the development of these pits, we were able to backfill some of the completed pits with material removed from the newer locations being mined. The extended haulage to accomplish this type of backfill was adsorbed in the cost of operations during mining. However not all areas would accommodate this approach and three pits, Moosehead, Beavertail, and Padre were backfilled with waste material which was hauled back from waste dumps. A total of 250,000 Cu Yds for the Padre Pit, and approximately 290,000 Cu Yds for the Moosehead and Beavertail combined, were required to complete the filling of the inverted portions of these pits.

Two miles of haulage roads at the site were reclaimed from a width of 70 feet to a maximum of a 30 foot width. This road along with a new 1/2 mile of connecting road will be left as a primary access road into the Goldstrike Area following the mine closure. This will replace an old road which traversed up through the east fork drainage. This old road base was ripped and seeded during the 1998 reclamation effort. The haulroad side slopes were regraded, where possible while still maintaining a roadway, to a slope of 2.5:1 or gentler and were topsoiled and seeded with a BLM approved seed mixture. Approximately 200,000 Cu Yds of material has been moved to complete the regrading of the haulroad side slopes.

Work on the leach pads was completed in 1998, with the ripping and seeding of Pad 1 and the resloping, topsoiling, ripping and seeding of Pad 2. Approximately 400,000 Cu Yds of material was moved on Pad 2 to reach the optimum slope of 2.5:1 or gentler. A D9G & a D10G were used to reslope this pad as the material needed to be moved quite some distance to attain this overall slope. The two cats worked for 52 days to complete the resloping of Pad 2. Topsoiling of the pad required approximately 60,000 Cu Yds of material.

Six ponds at the site were backfilled after their liners were either salvaged by the BLM or folded and covered with fill material. All concrete foundations at the site were broken and pushed into the ponds before backfilling. All structures have been removed from the site. All areas that had been disturbed during the life of the project were recontoured, where needed, ripped and seeded.



An additional 36,500 linear feet (6.9 miles) of exploration roads were recontoured and seeded at the request of BLM.

The accompanying photographs are an attempt to show areas both before and after reclamation. Some of the work completed in 1995 show the success of the seeding in those areas. The photos demonstrate the overall effect that reclamation can have on areas impacted by mining activity.



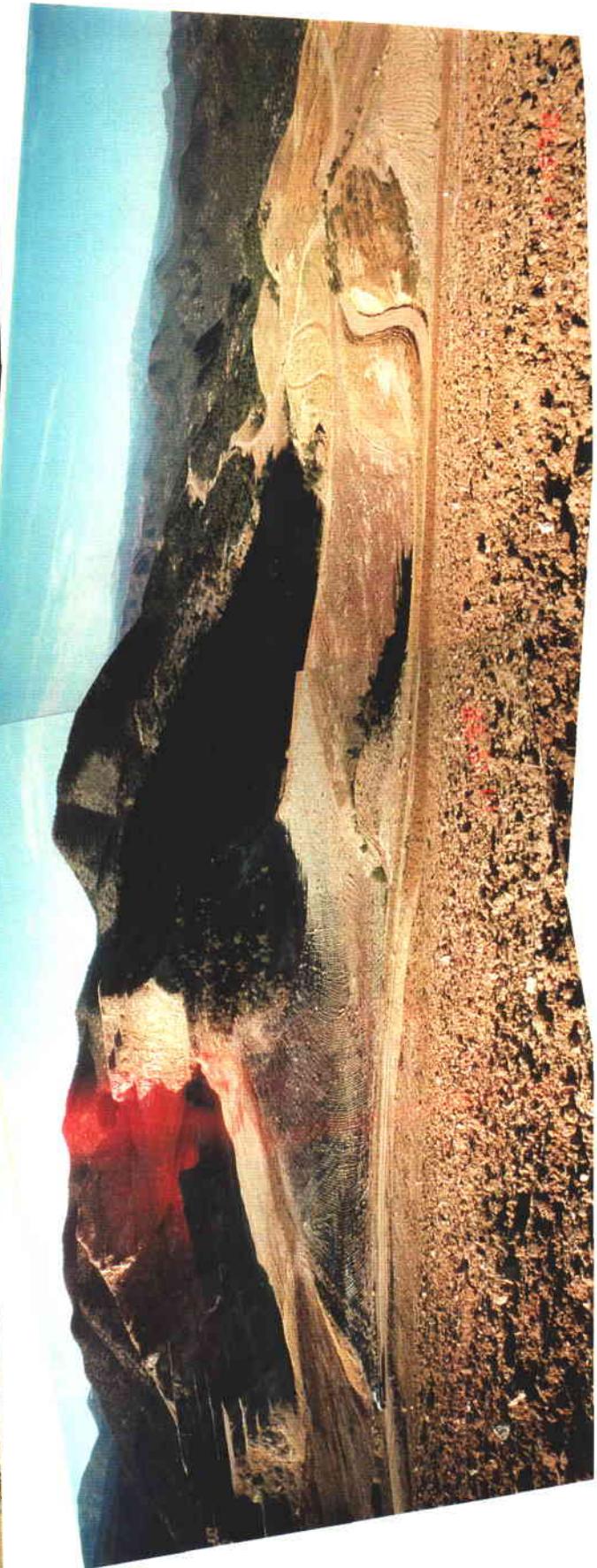
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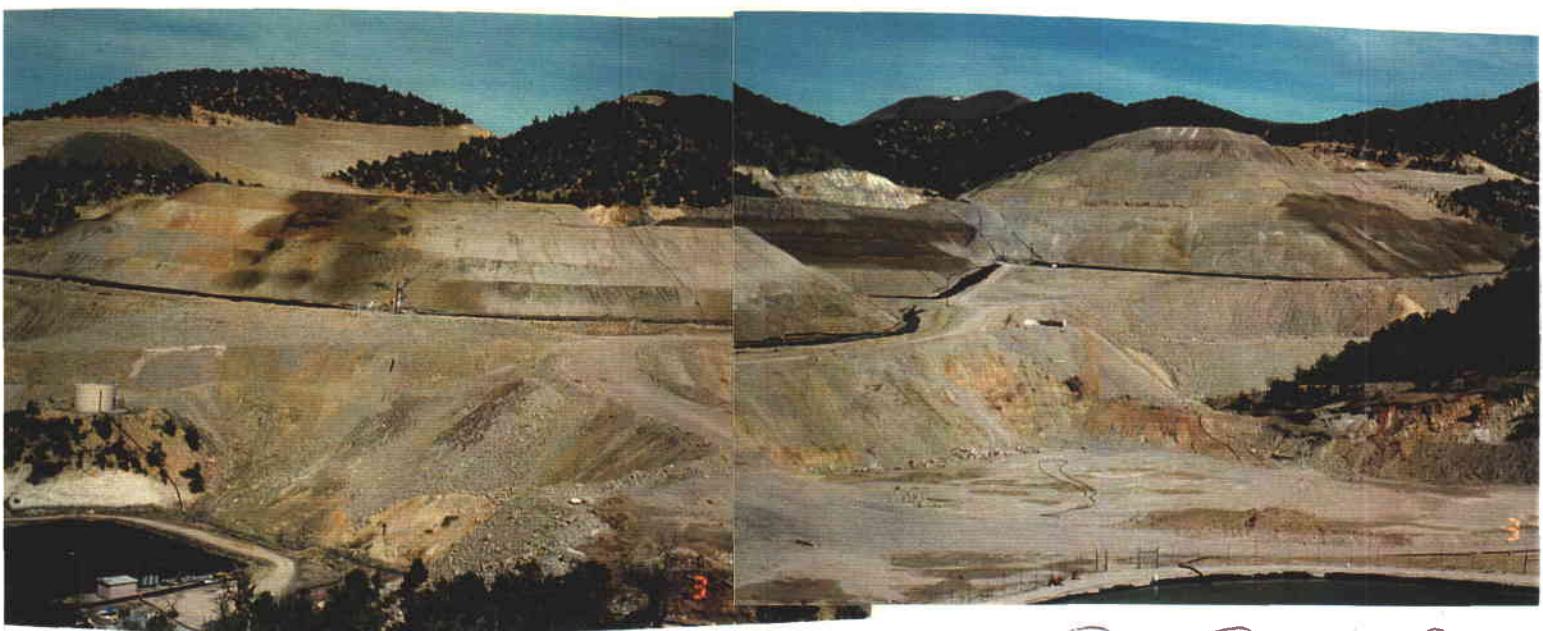
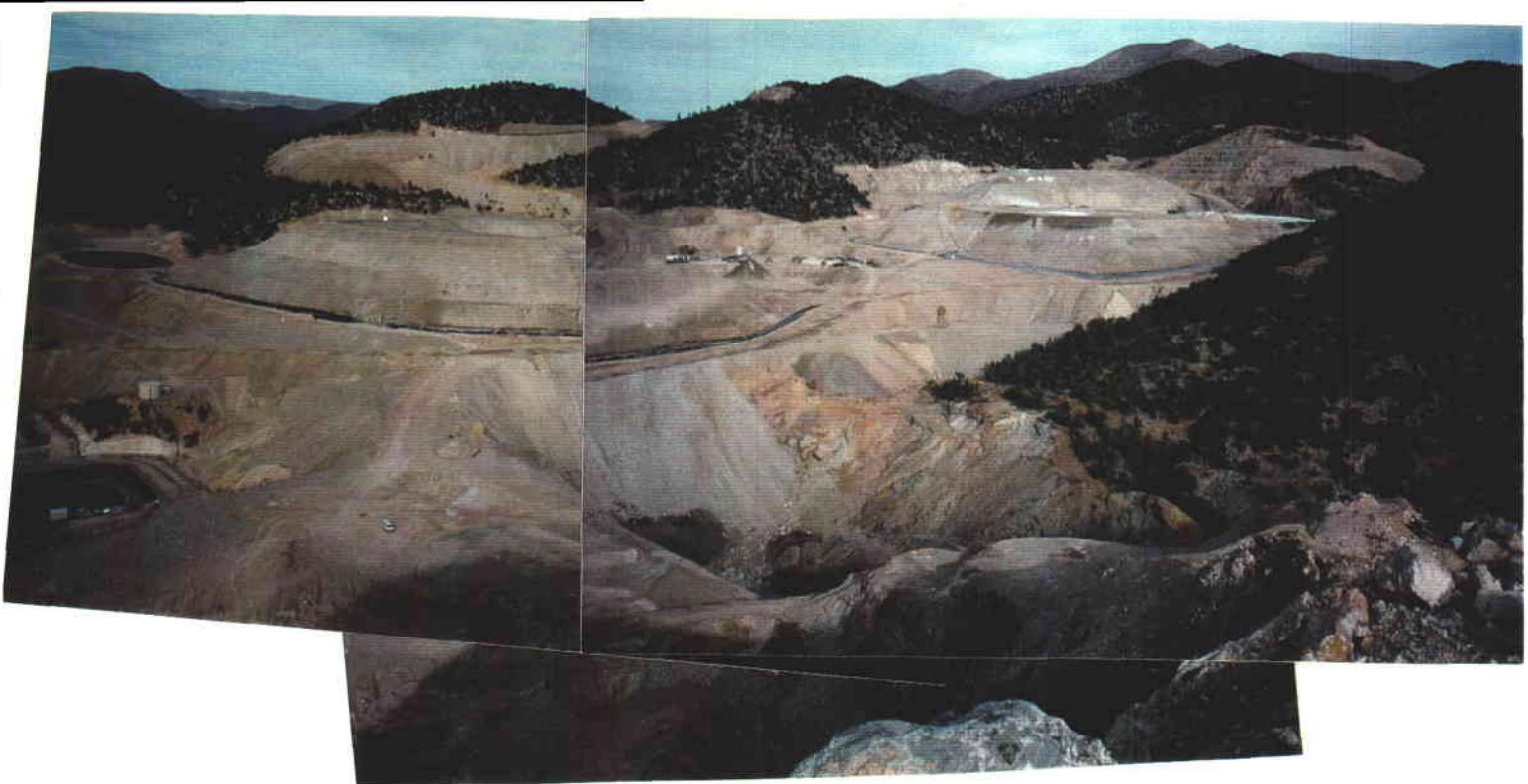
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GOLDSTRIKE MINE SITE

**USMX**

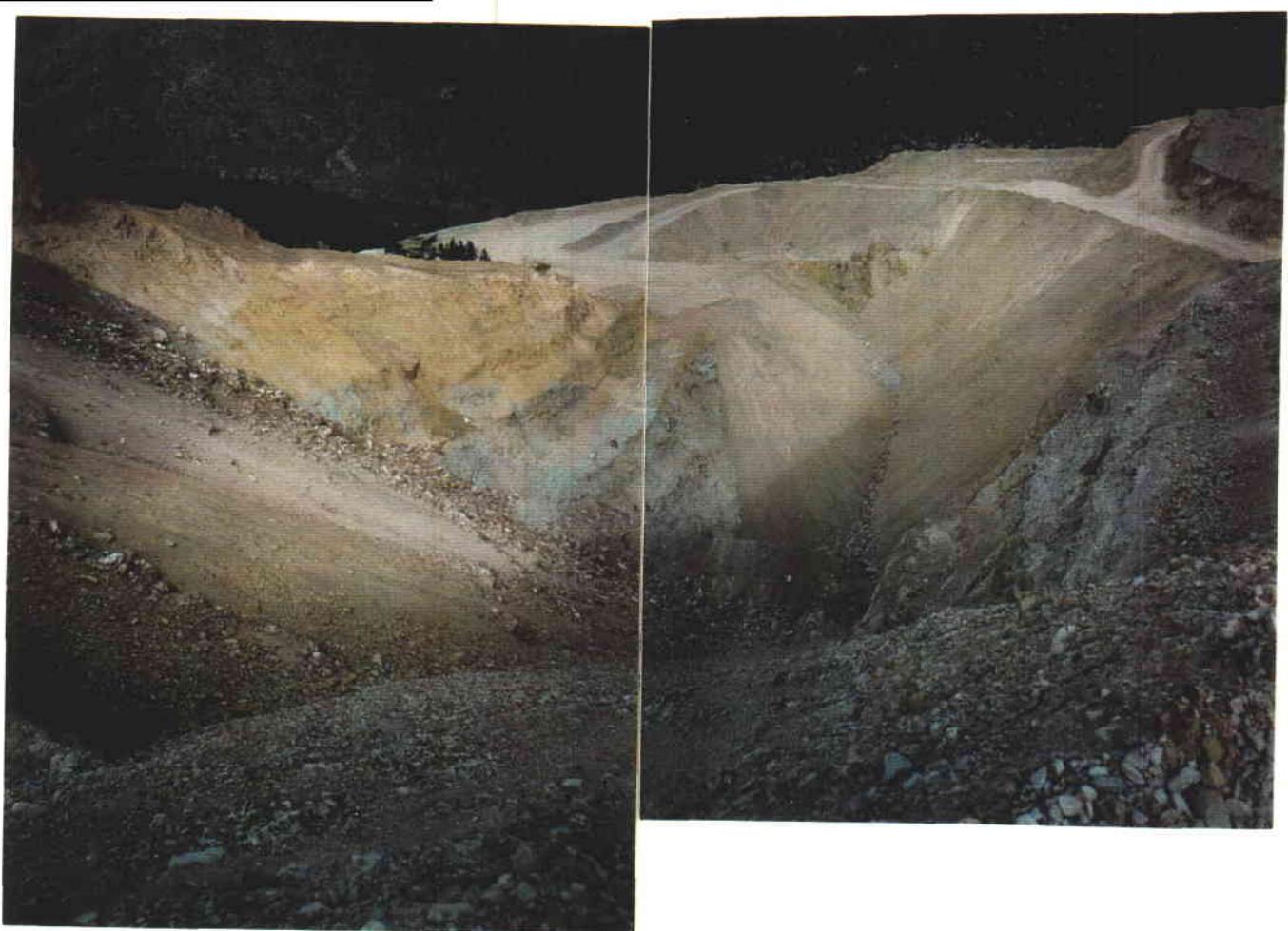


**USMX**



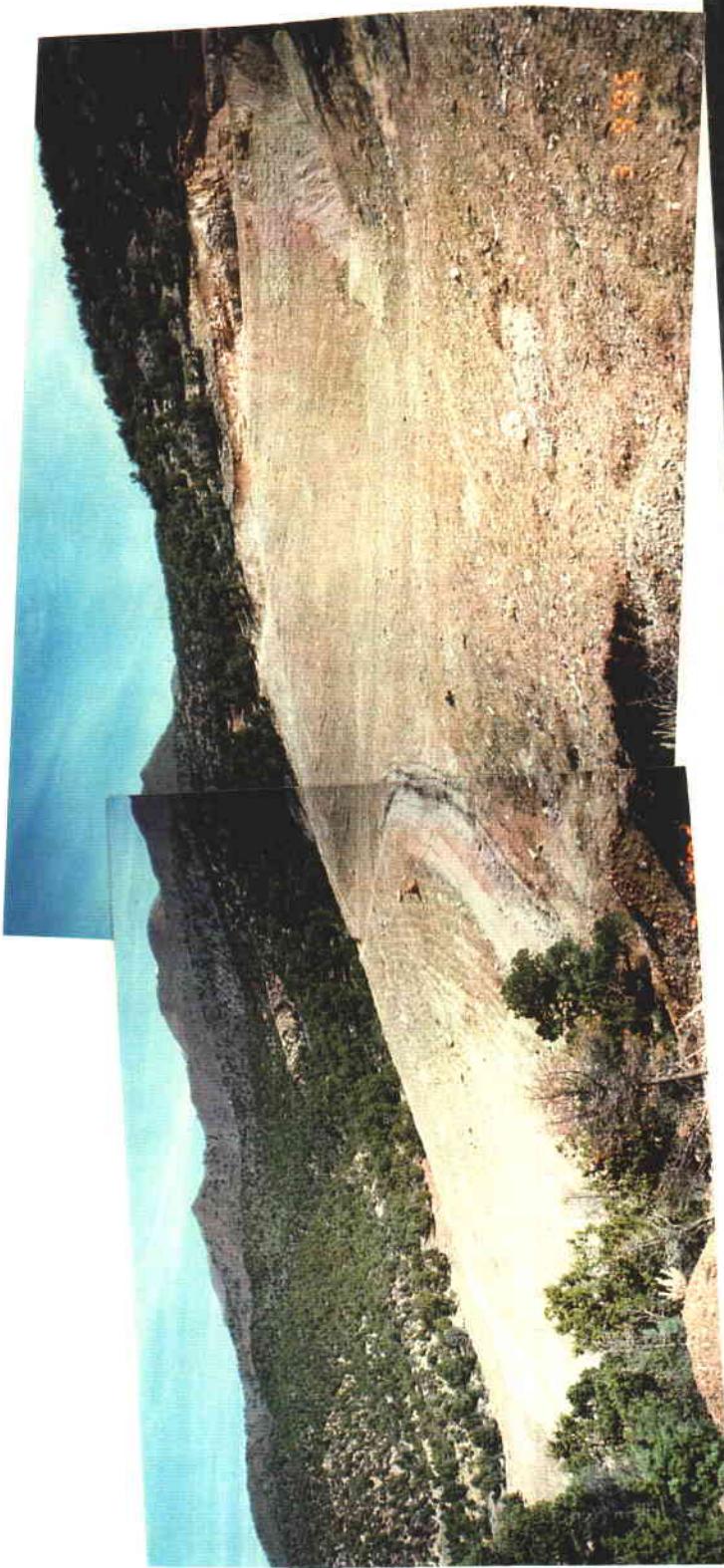
HAMBURG PIT PAD 1 & 2



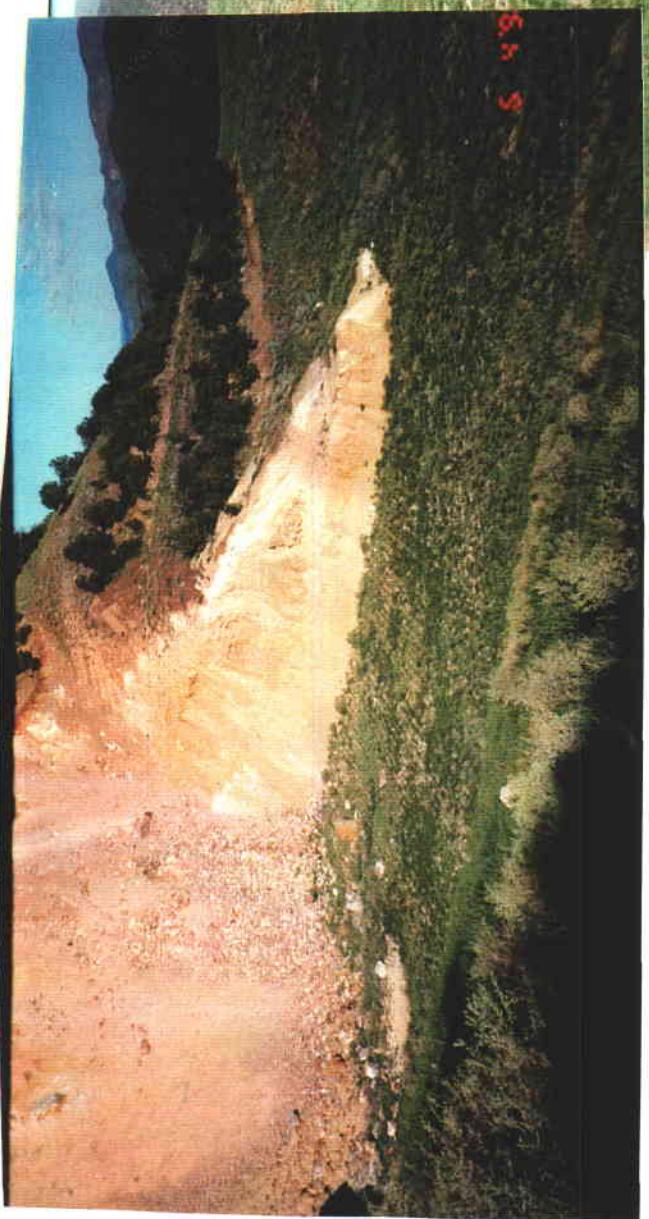
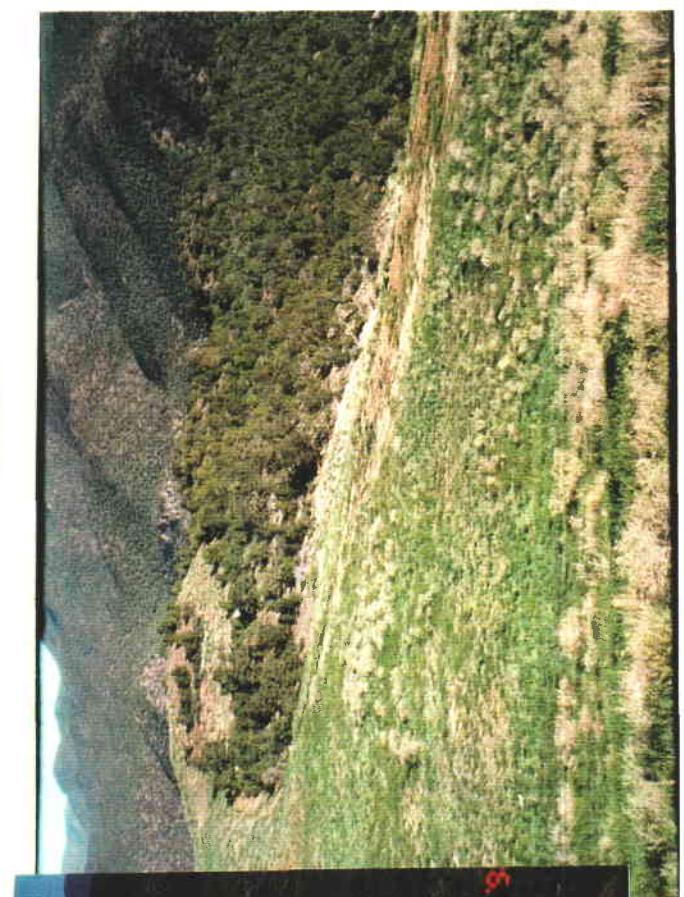
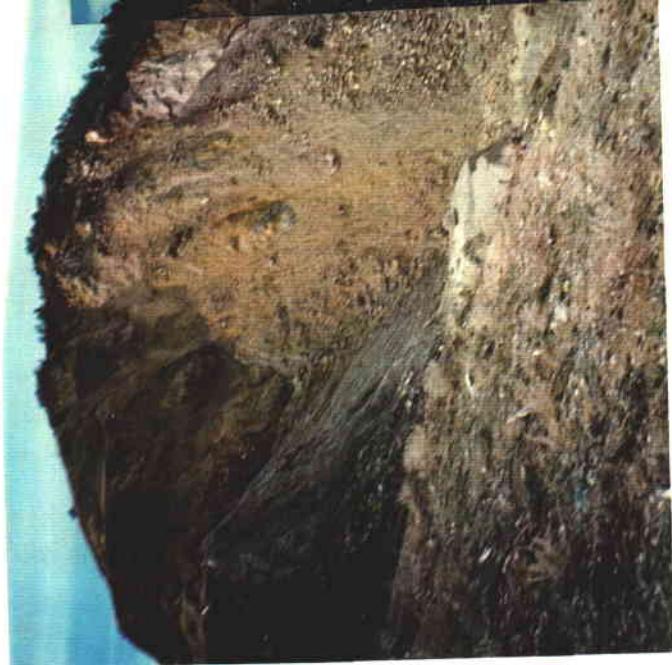
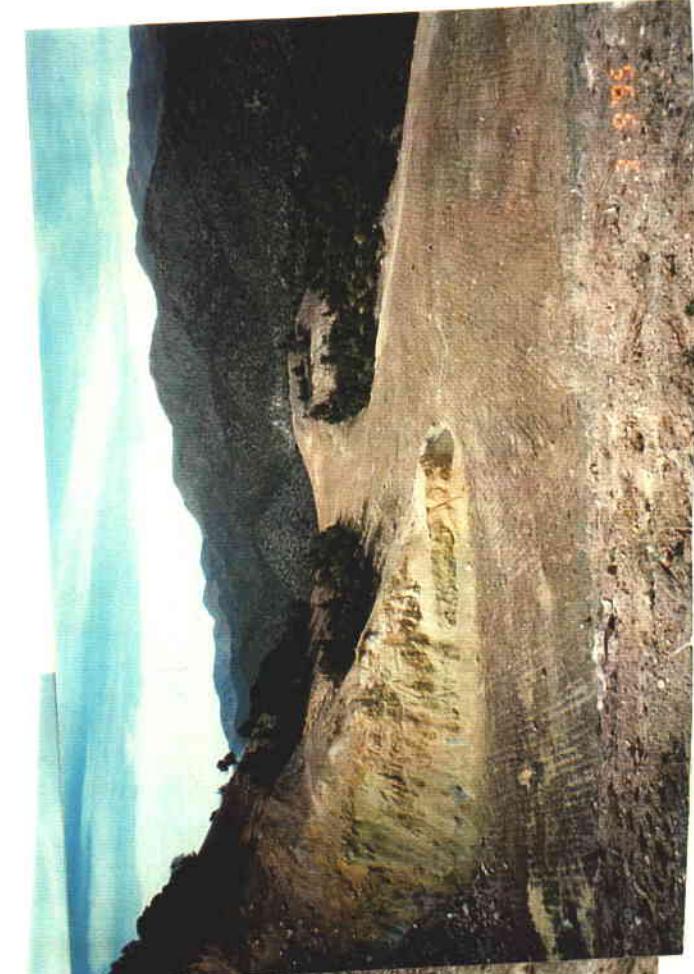


PADRE PIT

**USMX**



TADDEE PIT

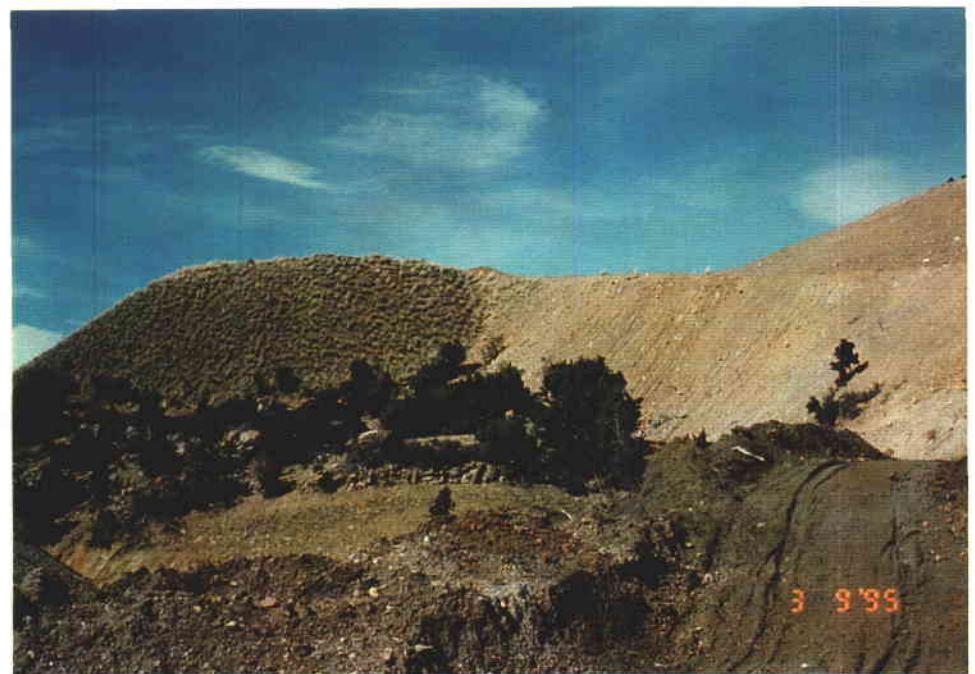
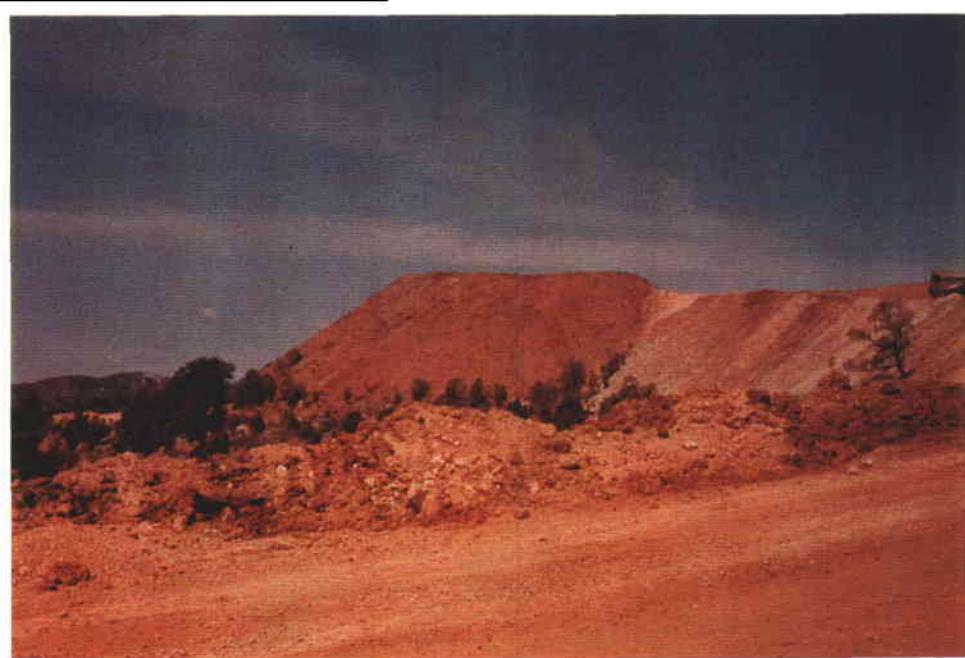


Panoramic



PADRE HAULROAD  
2E2 PORTION - PAD 2

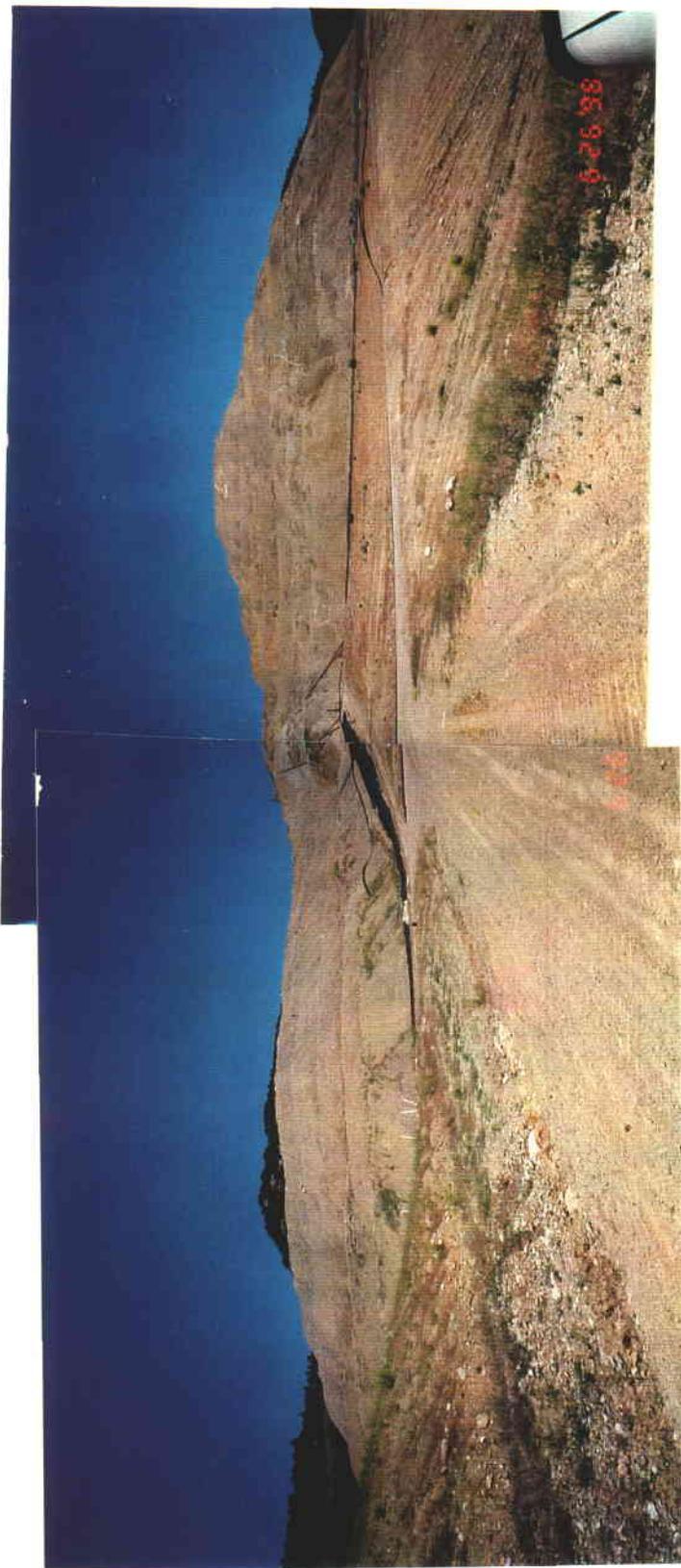
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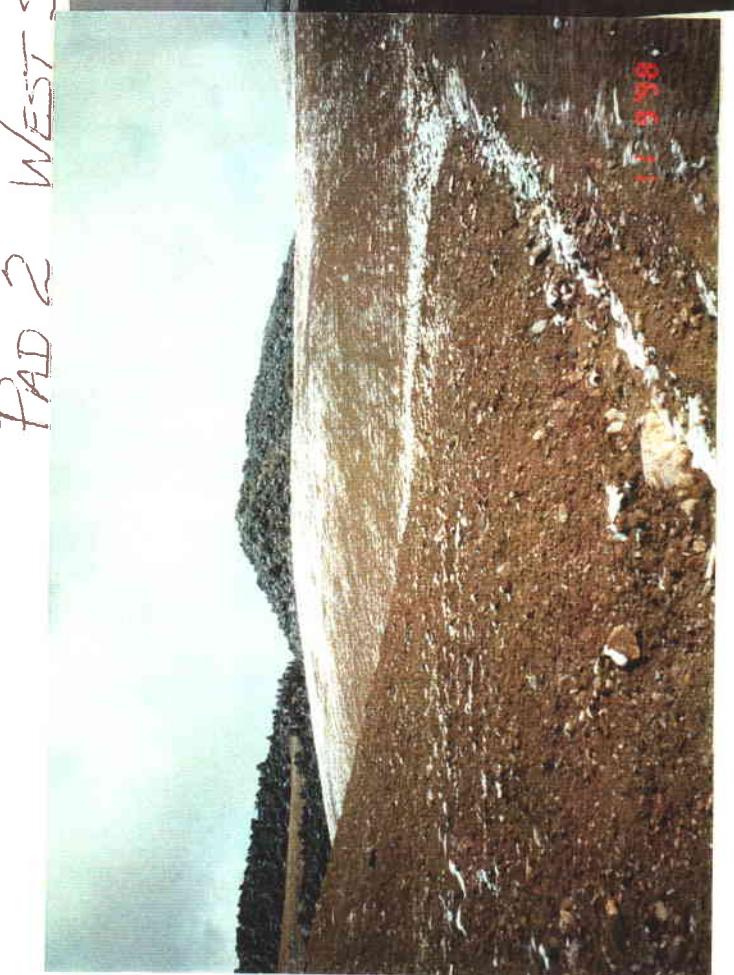
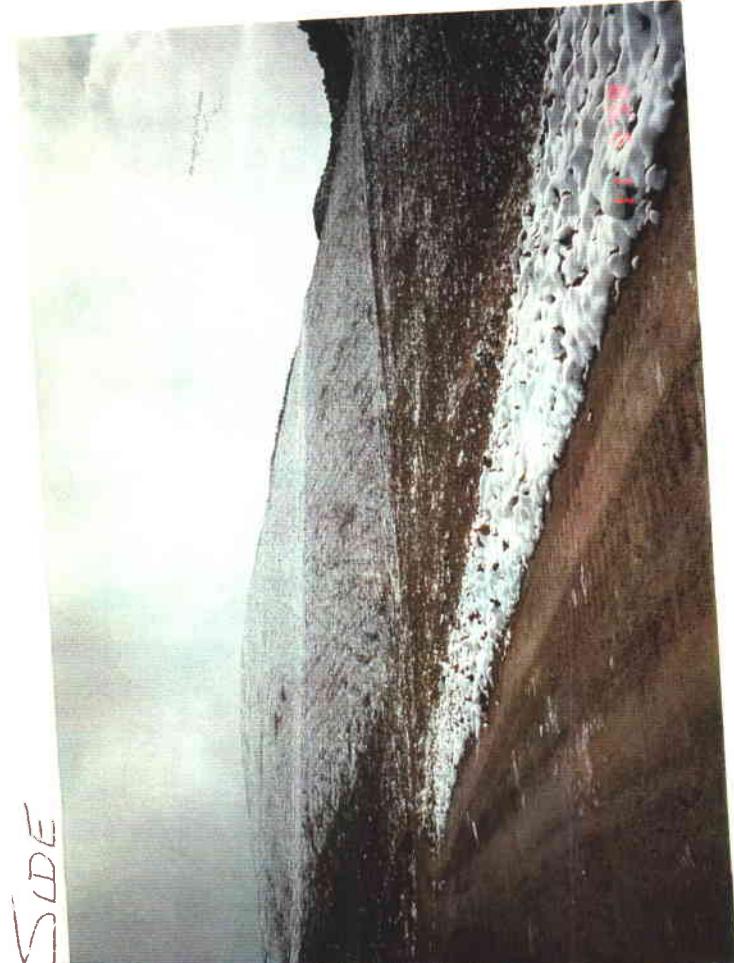
TOPSOIL PILE - PADRE HAULROAD



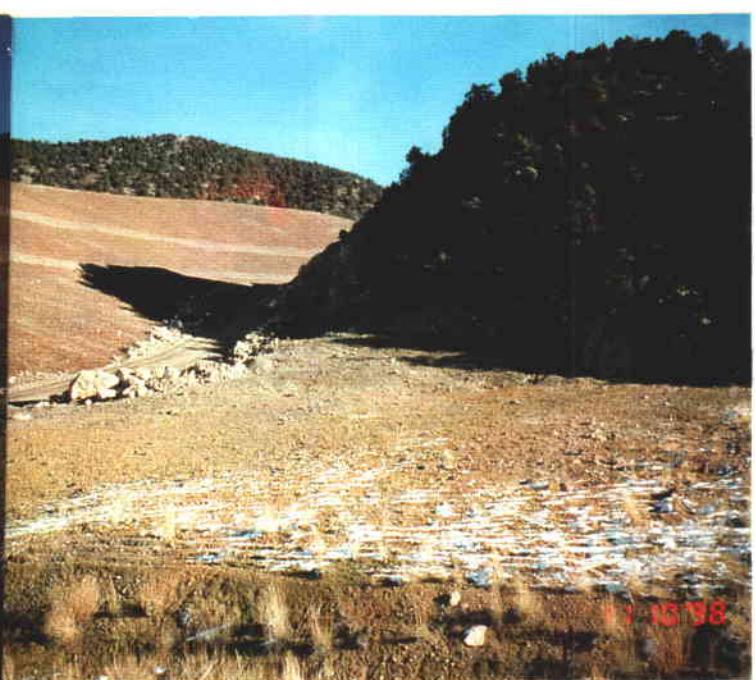
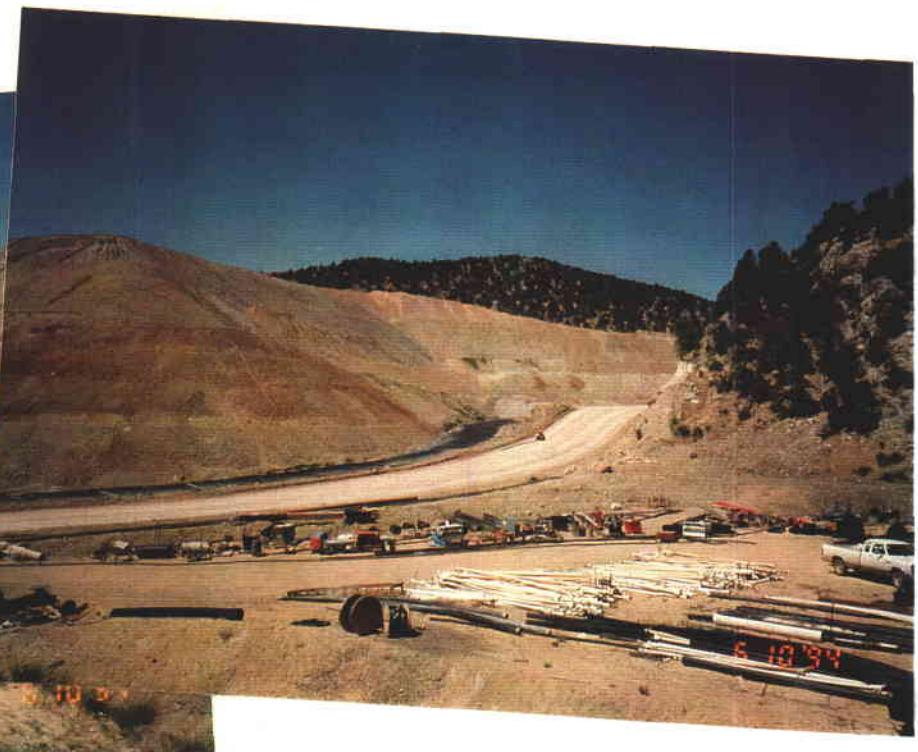
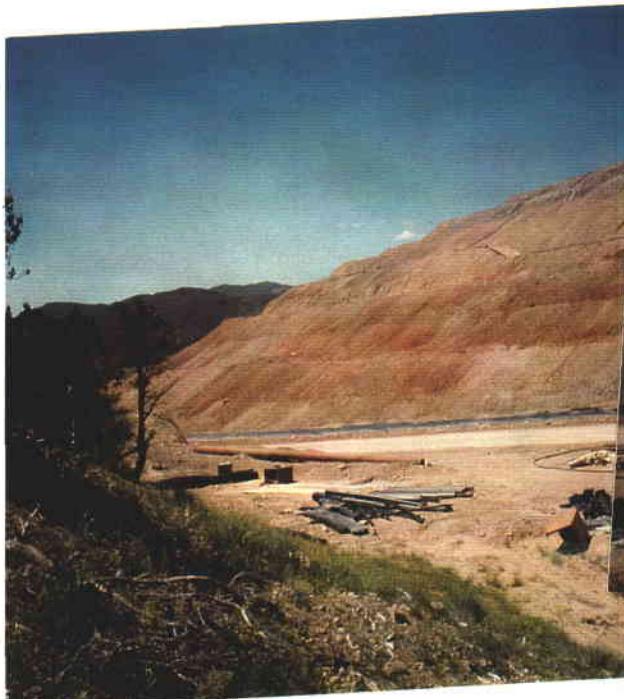
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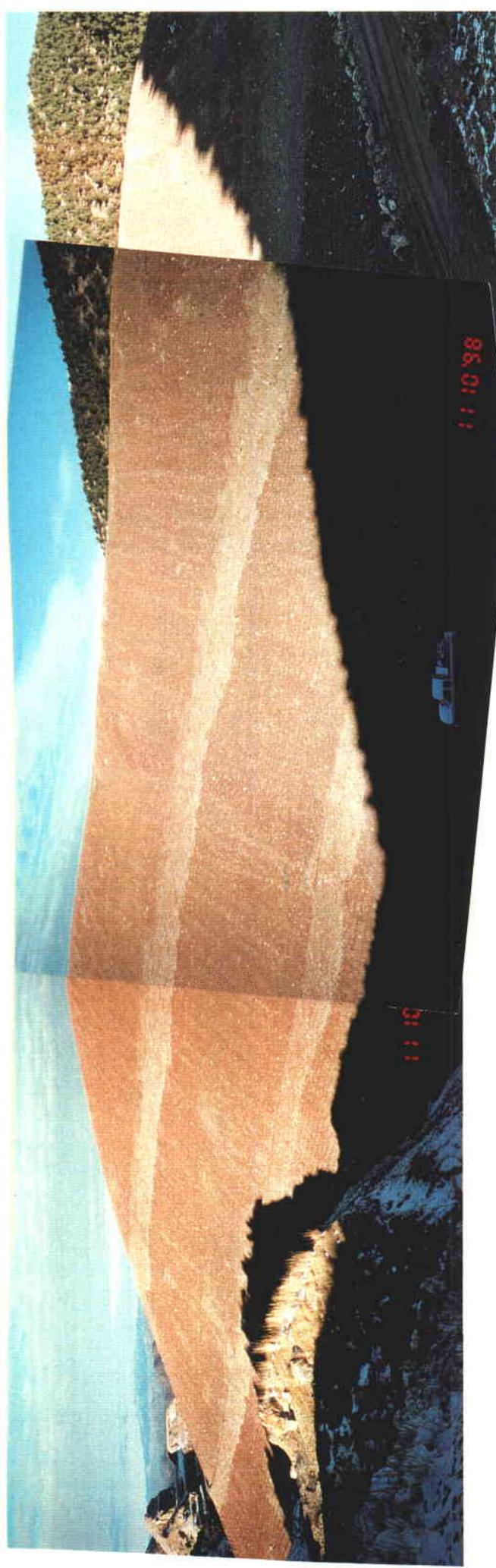
Pad 2 West Side



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QUAIL DAM & PAD 2 (South Side)



South Face Pad 2



EAST SIDE OF PAD 2



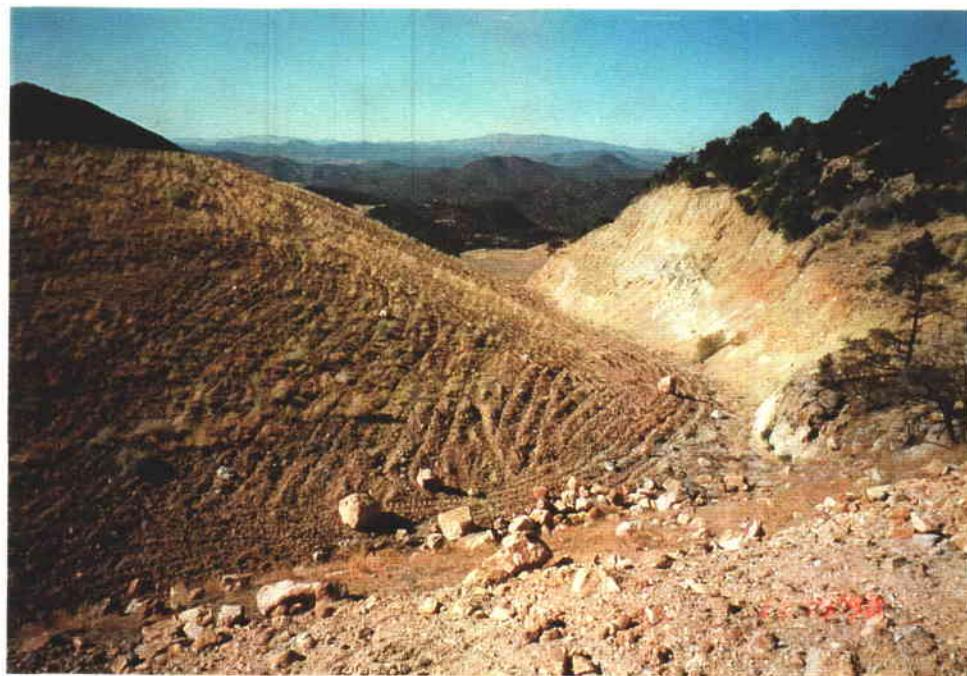
EAST SIDE PAD 2

**USMX**



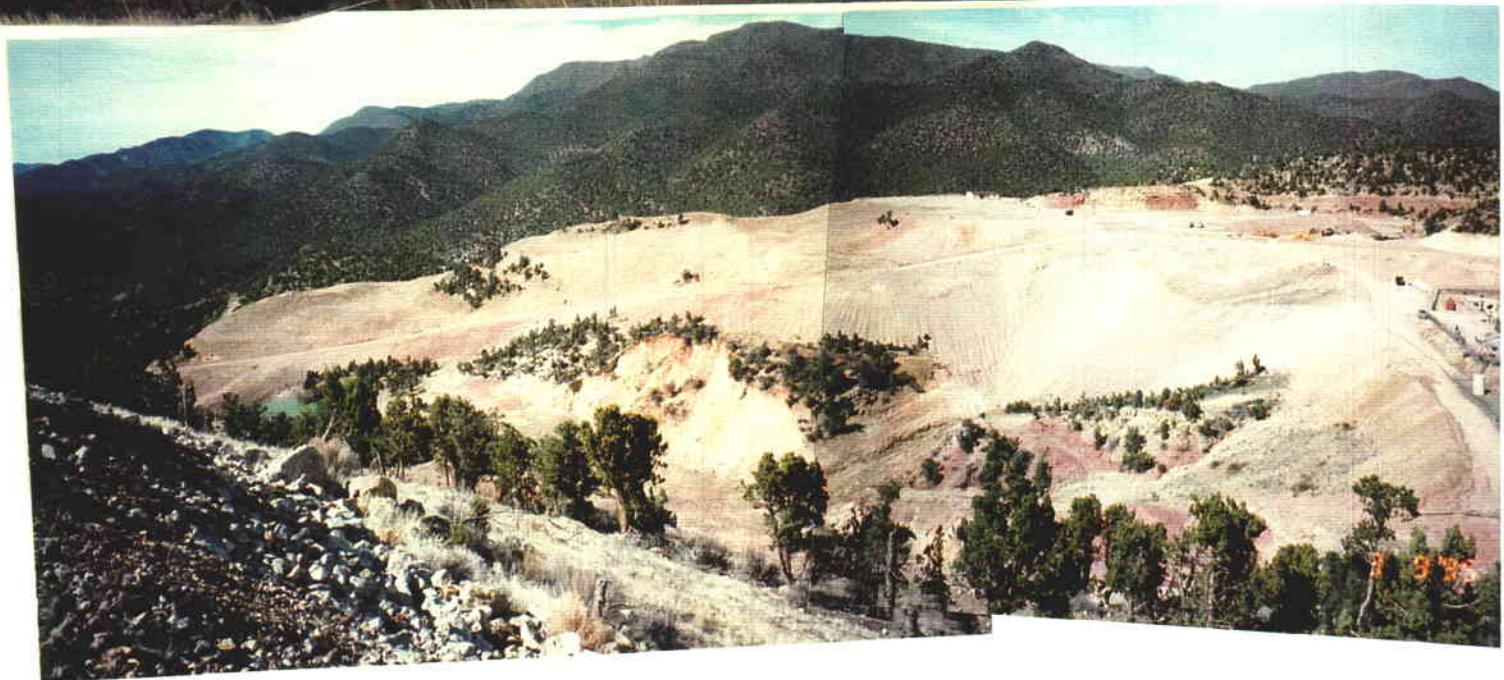
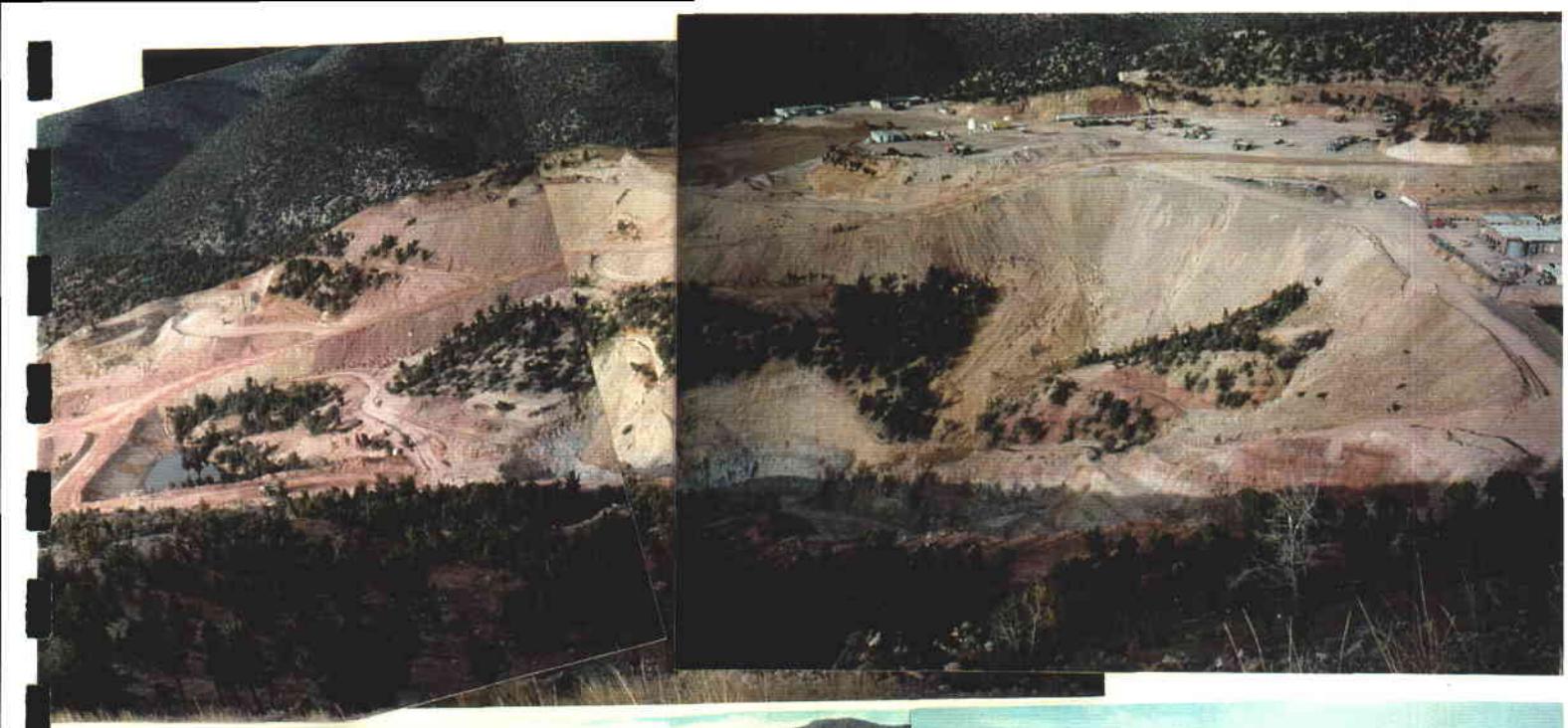


NORTH WEST SIDE PAD 1  
HAMBURG POND (BACKGROUND)

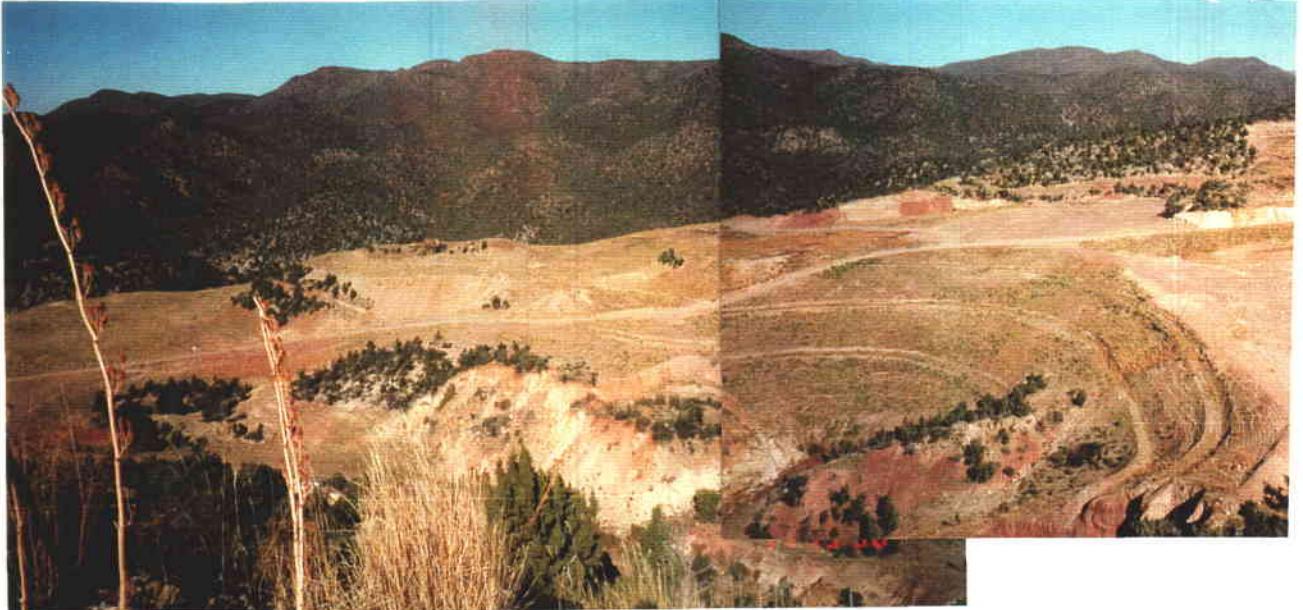


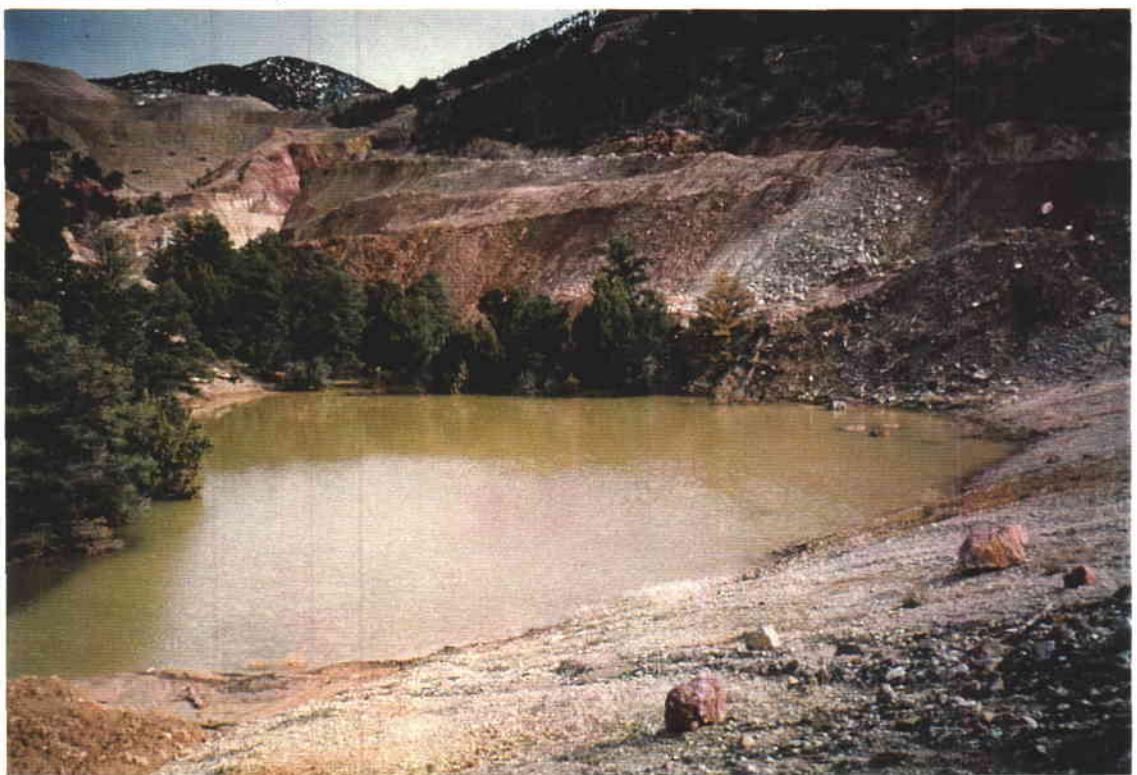
NORTH SIDE PAD 1 - RINSE POND

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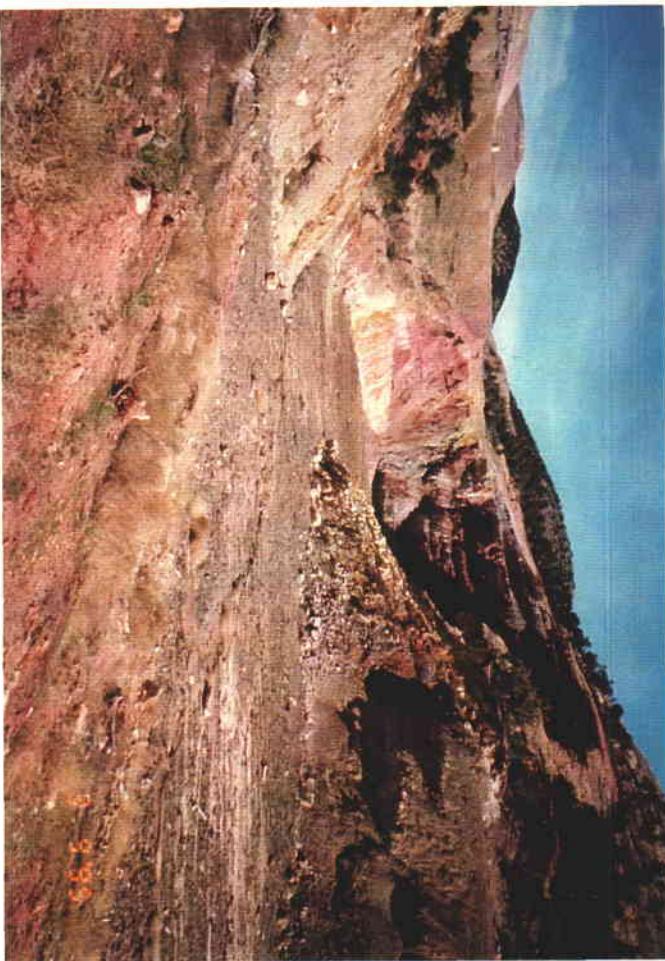
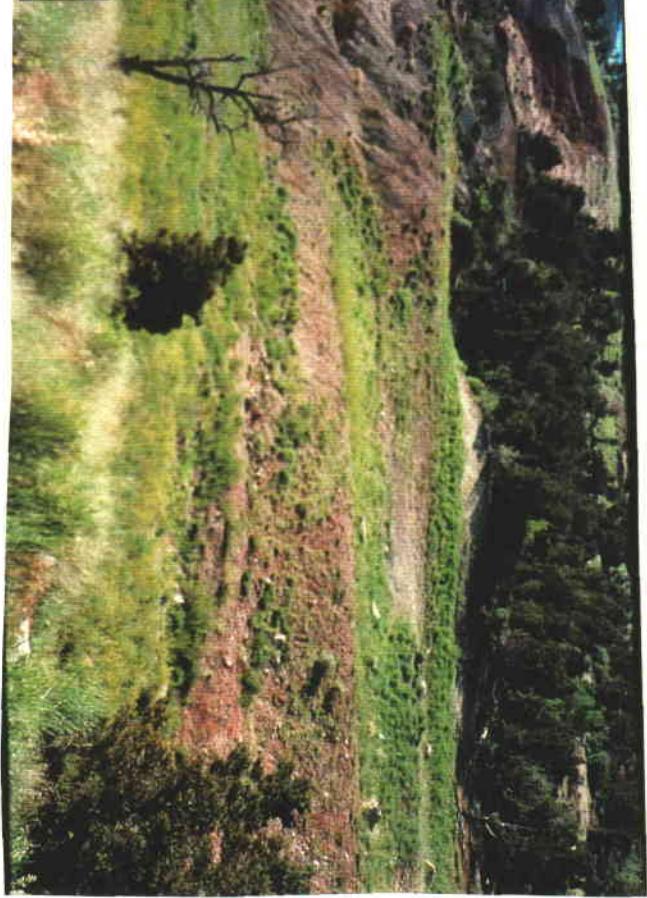


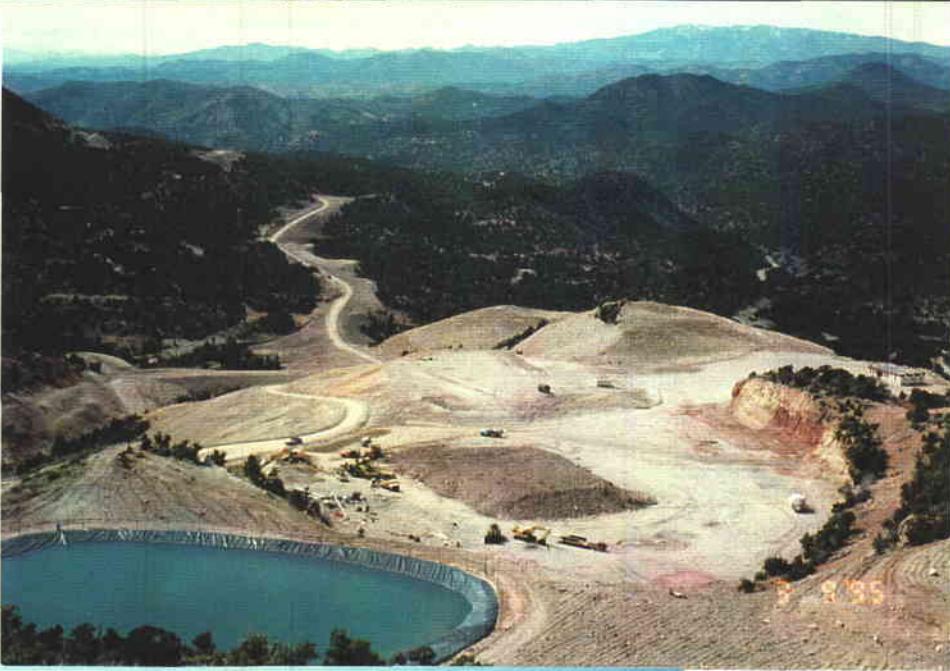
BASIN PIT - DUMP 1 (BACKGROUND)





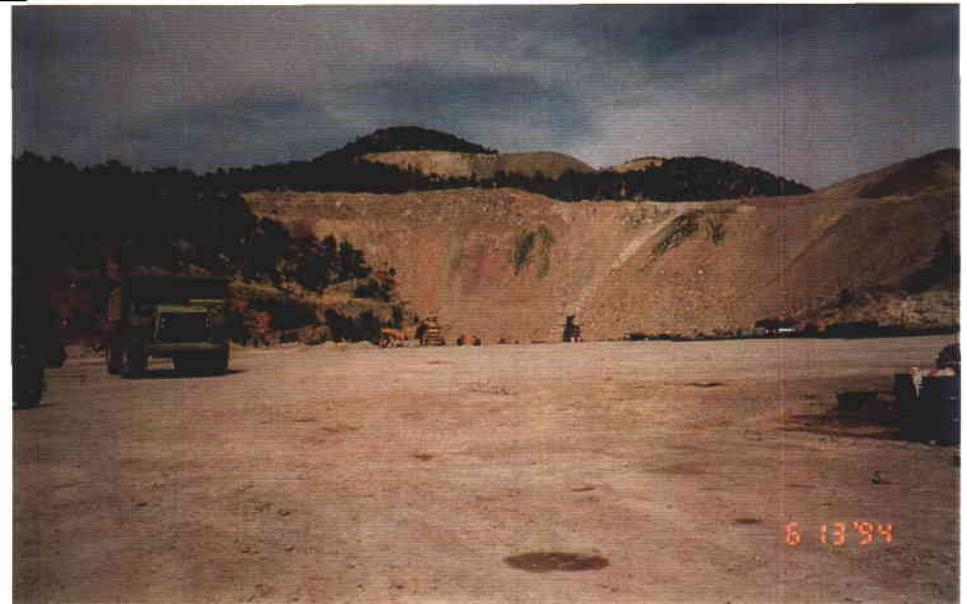
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RINSE POND  
Dump 1

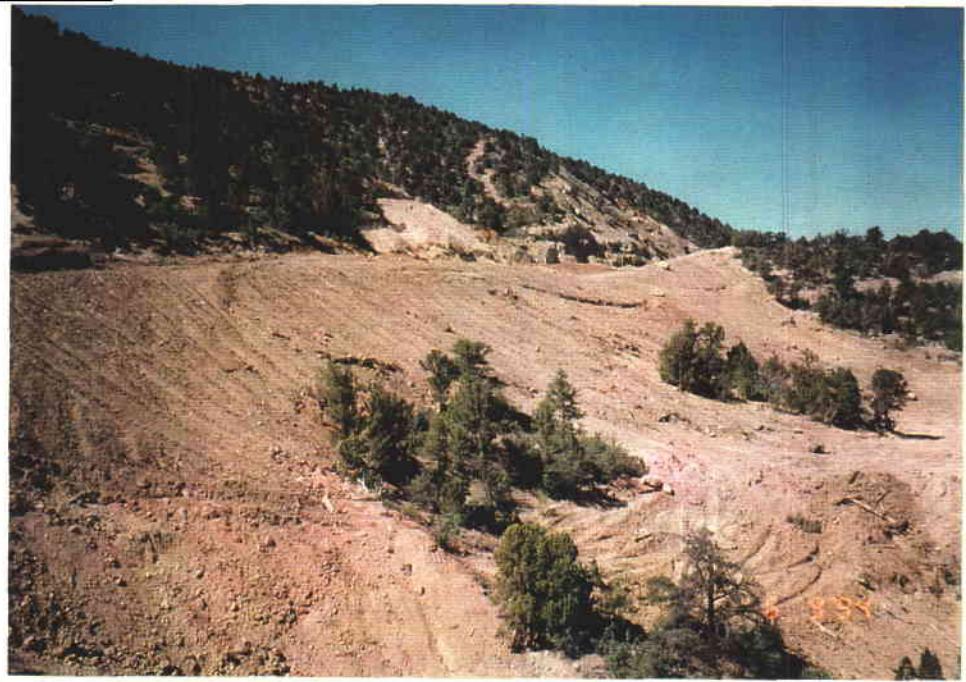
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Dump 1



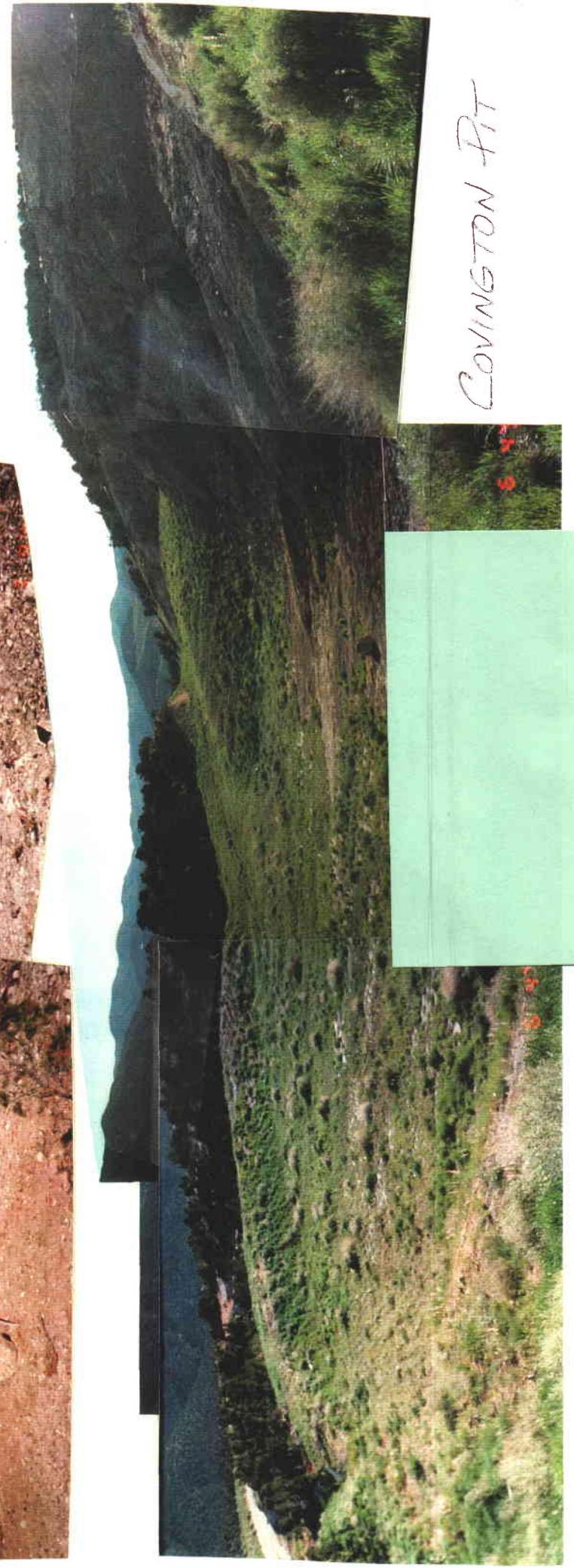
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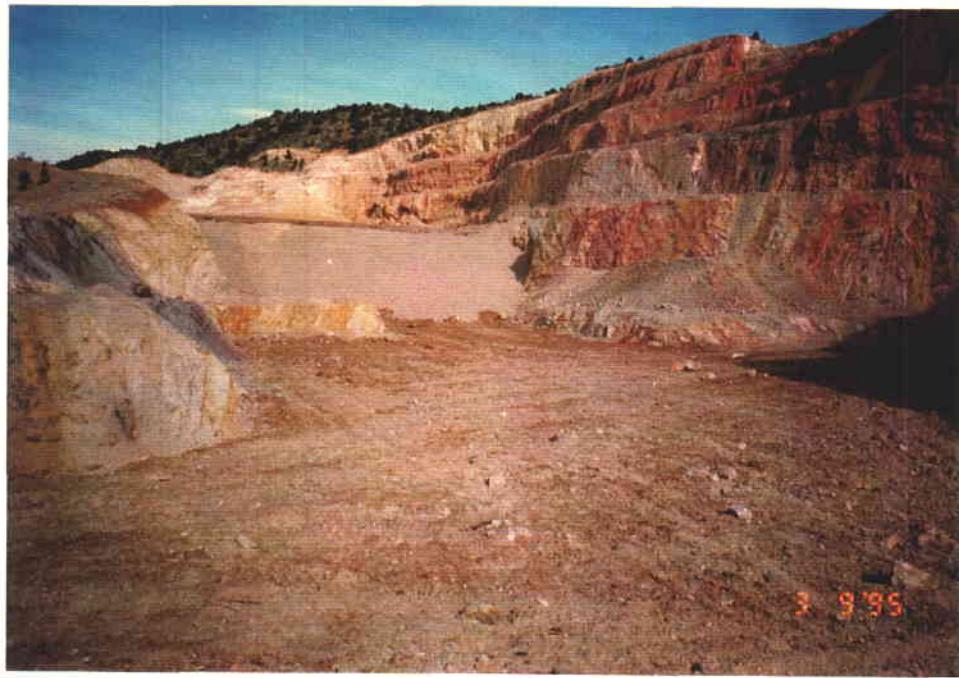
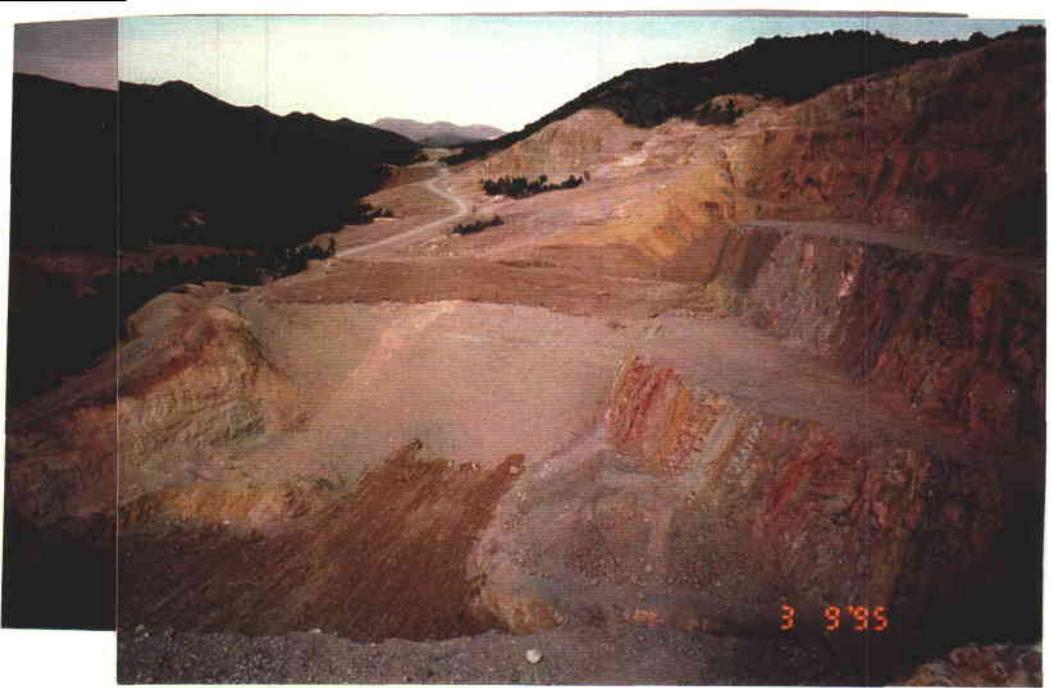


COVINGTON HAULROAD



COWINGTON Pt

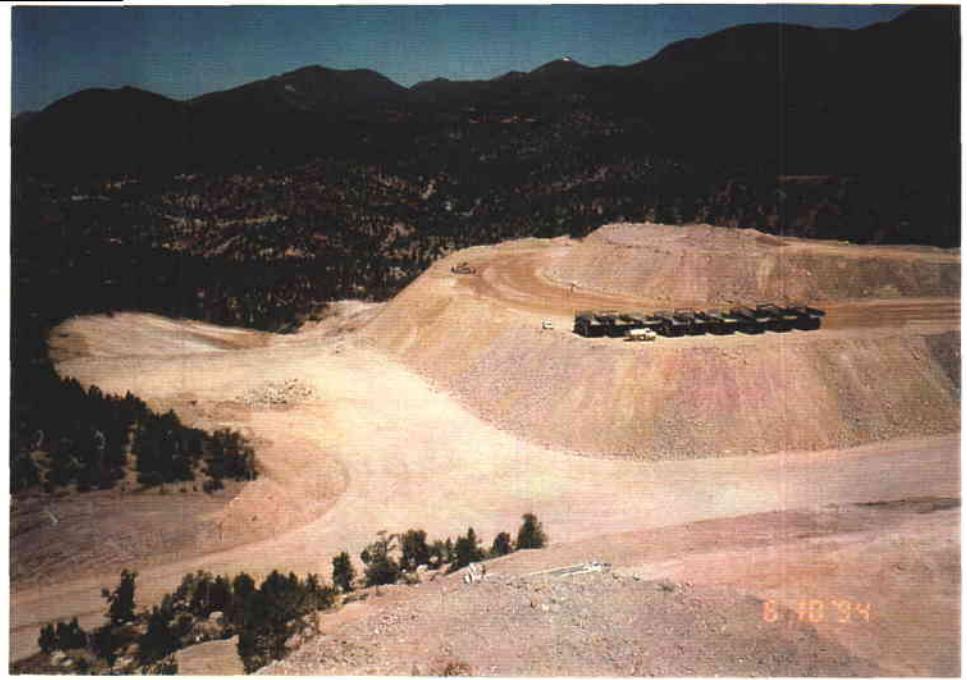




MOOSE HEAD  
PIT

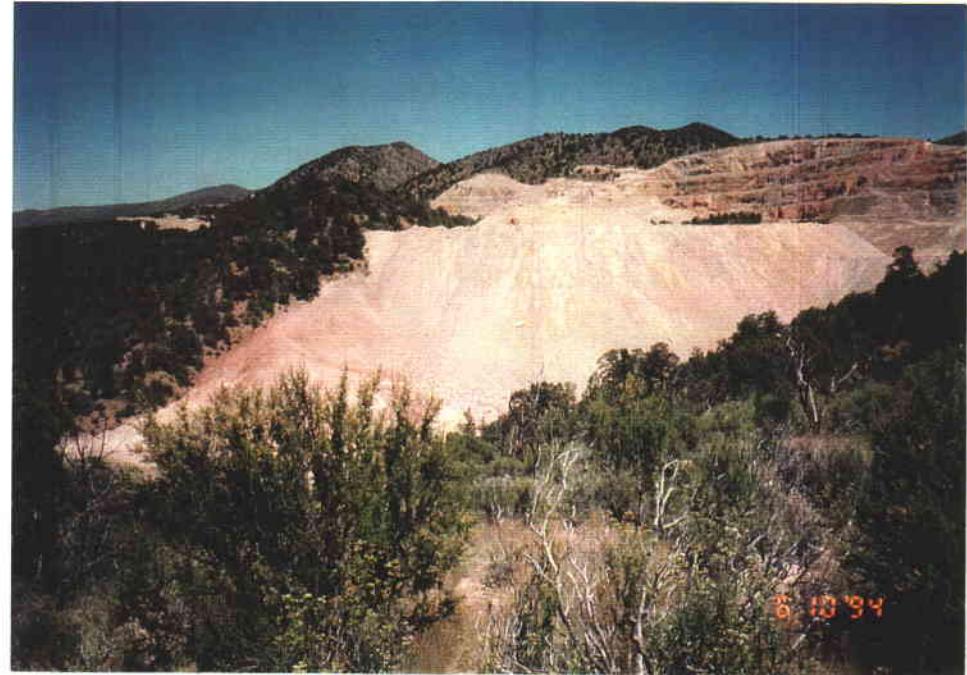


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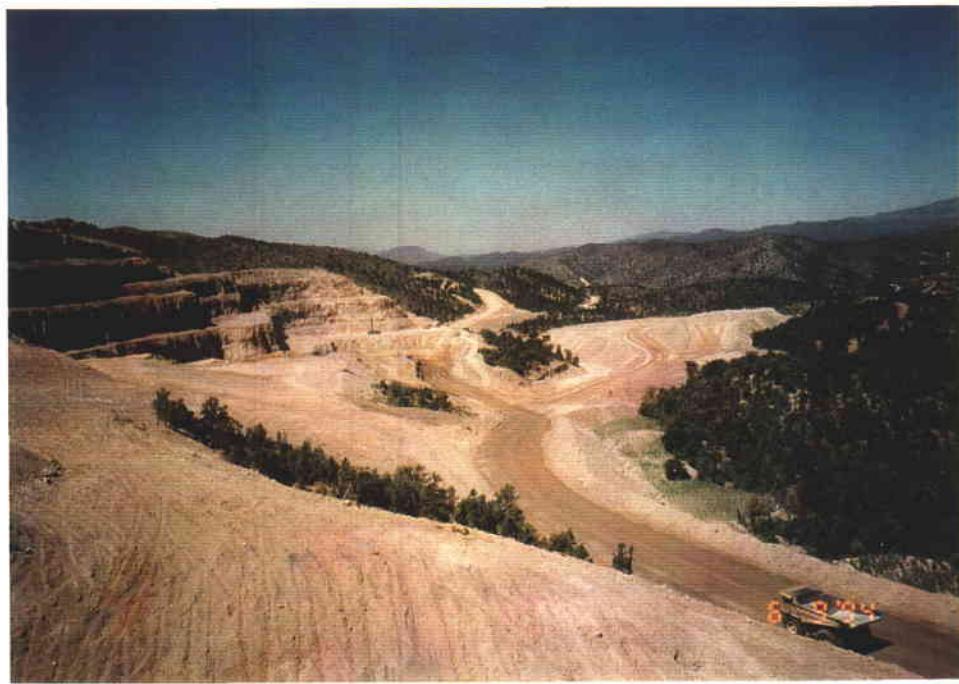
Moose Head Waste Dump





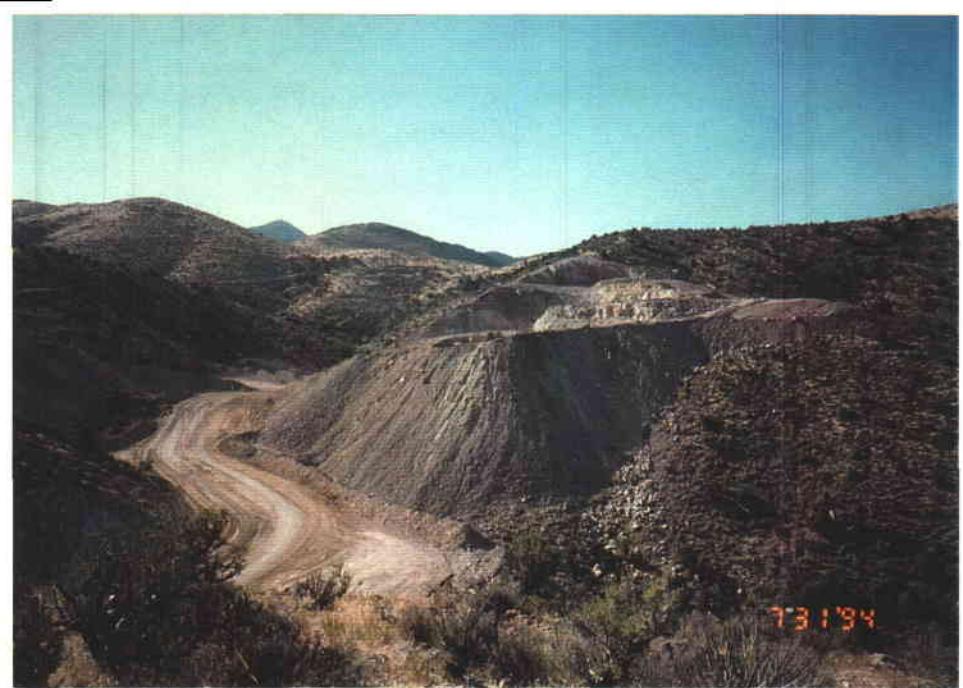
Moose Head  
Waste Dump

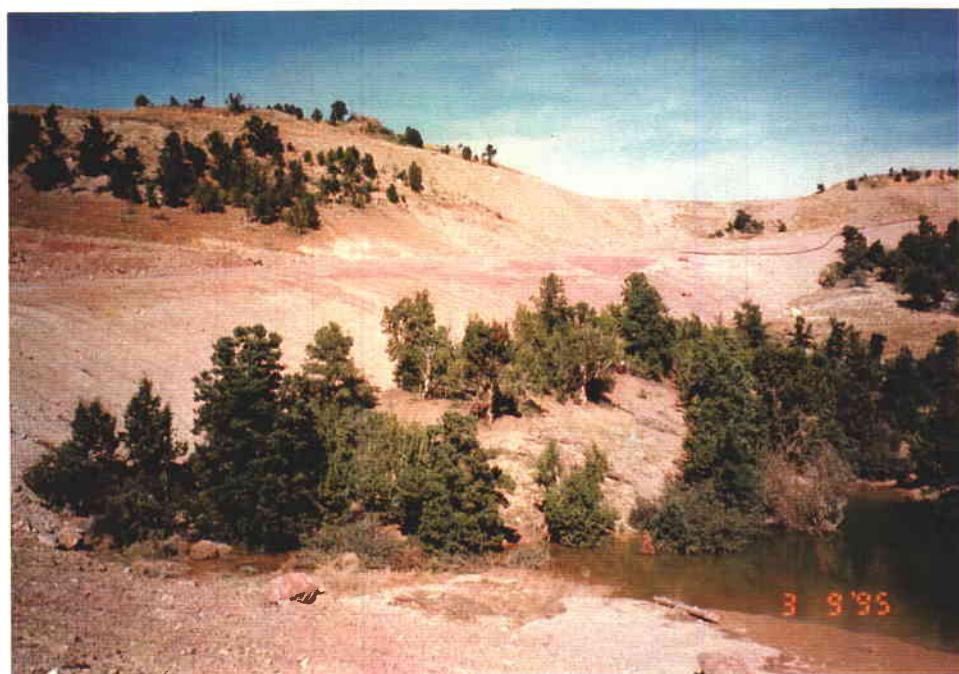
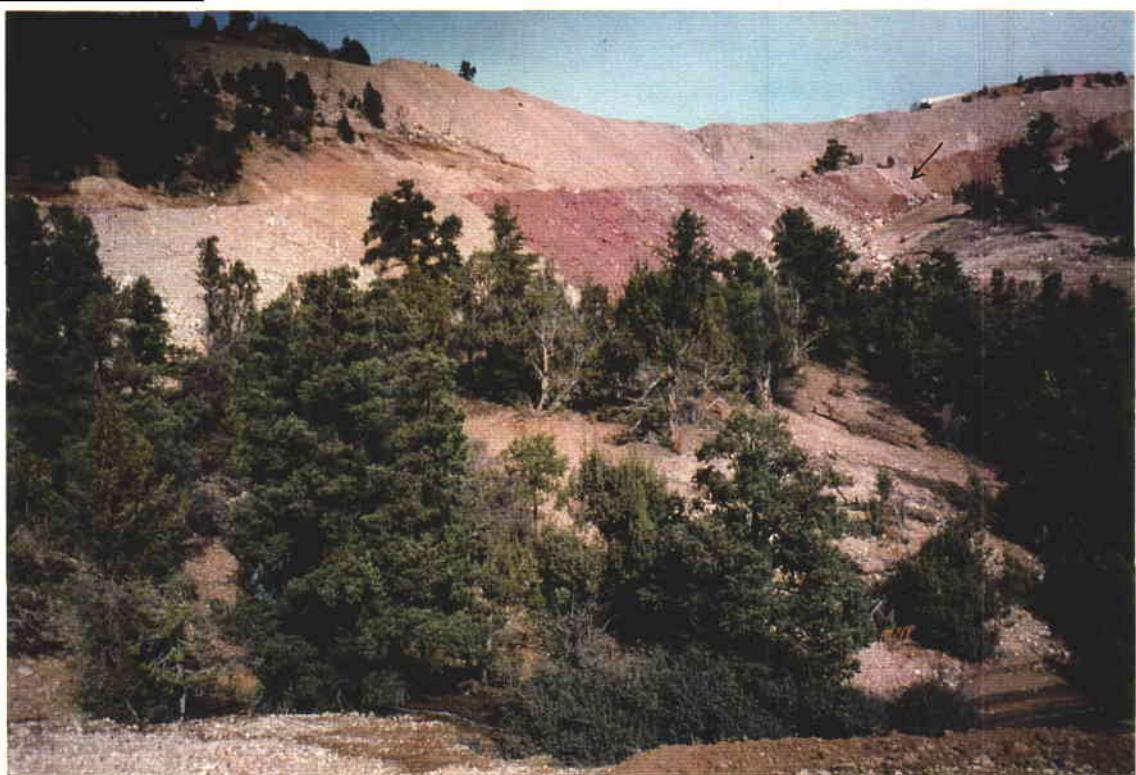
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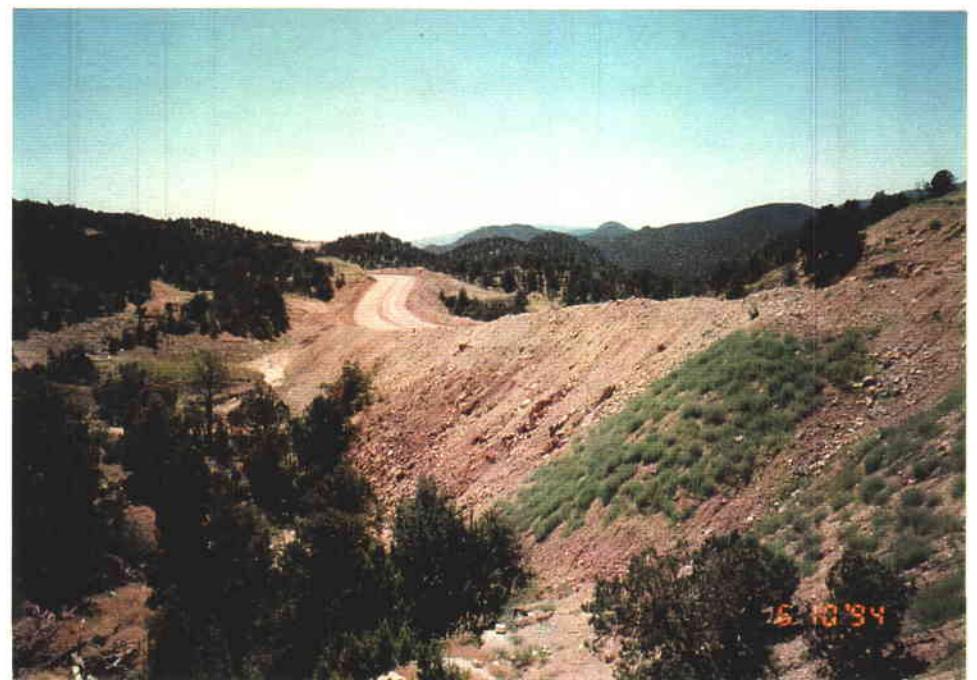
Moose Head Waste Dump

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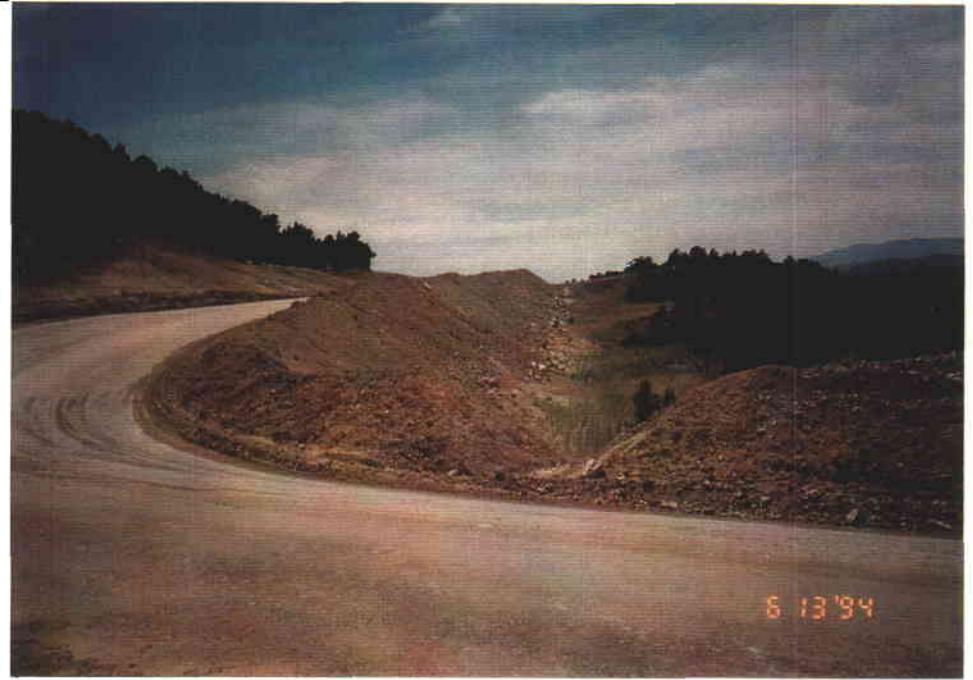
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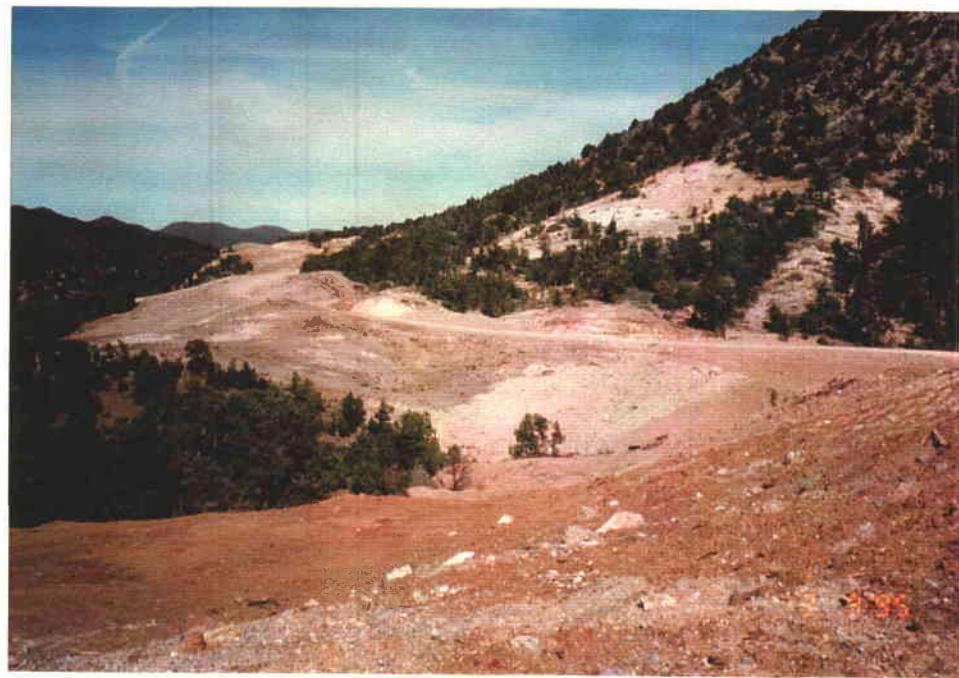
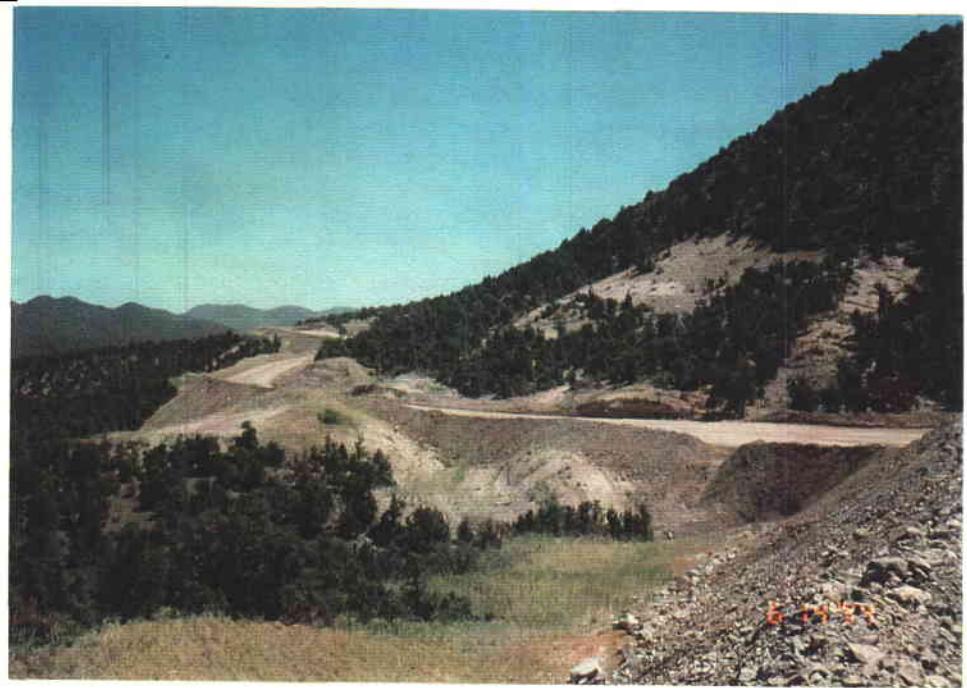


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HAULROAD

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Haulroad & Drill Roads

**USMX**



## EXPLORATION ROADS



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